



Remote Sensing and Geospatial Data Analyst

We translate data into knowledge for making smart land use and policy decisions.

Spatial Informatics Group, LLC (SIG), is an environmental think tank focused on solving complex environmental problems and taking unique solutions to market. Founded in 1998 by four PhD candidates, our group combines spatial analytics with ecological, social and economic sciences to understand and quantify the impacts of management and policy choices on the short and long-term stability of ecosystems.

We specialize in capturing geospatial data using remote sensing technology, and offer services in environmental mapping, ecosystem quantification, forest management, forest carbon offsets, and fire risk management.

We're a tight knit, mission-driven team, distributed across the globe, and positioned for rapid growth. Come join our team of applied thinkers, scientists, technologists, and business professionals.

Job Description: SIG is searching for a Remote Sensing and Geospatial Data Analyst

The successful candidate will have the expertise and experience to work closely with a small geospatial programmer team and project managers in developing geospatial tools, leading capacity building activities for client groups, and completing other tasks related to GIS and remote sensing. Proficiency with Google Earth Engine is highly preferred and experience with environmentally focused mapping and forest management projects is beneficial. The position may involve occasional travel to engage with clients for workshops, when conditions permit.

SIG is a digitally native organization with personnel distributed across three continents. Therefore, the position is for remote work only, preferably based in US compatible timezones.

Responsibilities. The following list provides a summary of the position's requirements:

- Work closely with a small team and various client groups on applied GIS/remote sensing analysis and reusable tool development in Google Earth Engine.
- Provide technical support on training courses, workshops, and other capacity-building activities in the planning, delivery, and follow-up phases, as needed.
- Ensure effective and efficient completion of activities and products to achieve project objectives.
- Complete analysis using scripting and geospatial tools such as: Google Earth Engine (JavaScript and Python APIs), ArcGIS, QGIS, ENVI, R, Collect Earth Online, and SEPAL.
- Contribute to proper documentation of procedures and processes of work.
- Ensure proper data documentation and management, especially on cloud-based platforms.
- Participate in project-specific meetings, especially on technical development.
- Document methods, results, and lessons learned for final reports and peer-reviewed published materials.
- Interact with client groups around the world through virtual meeting platforms.

Requirements. The following list provides a summary of the position's requirements:

- A Master's degree in Remote Sensing, GIS, Geography, Computer science, or a related field. Candidates with Bachelor's degree in the fields of study above who can demonstrate extensive and direct work experience will also be considered.
- At least 3 years of technical experience focused on geospatial applications.
- Experience in capacity building focused on geospatial applications in GIS and remote sensing.
- Experience in ArcGIS, ENVI, or QGIS.
- Experience in Google Earth Engine, R or other software/portals used for geospatial programming.
- Experience with processing and analyzing optical and SAR satellite imagery, including Landsat, Sentinel-1, and Sentinel-2.
- GIS database management using both ESRI (ArcGIS) and open source technologies. Knowledge on how to store and extract information from structured sets of geographic data is plus.
- Development and documentation in English is required.

Preferred Experience. The following list provides a summary of the preferred, but not required, skills for the position:

- Advanced programming skills in Python, JavaScript or R.
- Ability to learn new programming languages.
- Proficiency in Spanish, French, or other non-English language.
- Experience with using virtual machines (e.g. in AWS, Microsoft Azure).
- Experience with FAO's Open Foris, such as SEPAL and Collect Earth Online.
- Experience with accuracy assessment and area estimation.
- Experience with statistical analysis, such as map assisted sample-based area estimation or assessing uncertainty with Monte-Carlo simulations
- Experience with deep machine learning and neural networks using TensorFlow

Terms of employment: (full time, but part time may be considered upon request)

SIG is an Equal Opportunity Employer. We are committed to diversity which includes the recognition that our success is best advanced by the leadership and contributions of women and men of diverse backgrounds, beliefs and culture. We encourage applicants from all cultures, races, colors, religions, sexes, national or regional origins, ages, disability status, sexual orientation, gender identity, military, or other status protected by law.